

### Upper *M.diversus*

Data from the *M.diversus* zone from several wells provides a good fit to a straight line relationship for a lognormal plot of permeability verses porosity.

### Middle *M.diversus*

The middle *M.diversus* zone is well sampled from a number of widely spaced wells and shows that there is little scatter about a straight line fit. The data show that middle *M.diversus* reservoirs require a porosity of greater than approximately 15% before greater than 1 md of permeability is attained. At a porosity of 18% the expected permeability is 30 md increasing to 1000md at a porosity of approximately 22%. It is notable that this permeability verses porosity decline is steeper than that observed in the younger intervals.

### Lower *M.diversus*

The lower *M.diversus* zone is also well sampled from a widely spaced series of wells, however in contrast to the middle *M.diversus* zone results the data is widely scattered. It is concluded that other variables are imprinted on the data, such as depositional facies or diagenesis. Therefore the relationship of permeability to porosity cannot be predicted for sandstones of this age without reference to these variables.

### Upper *L.balmei*

The upper *L.balmei* zone is well sampled however the data, like those of the lower *M.diversus* zone, do not show a simple linear trend making prediction of permeability difficult.

### Lower *L.balmei*

Data from the lower *L.balmei* zone show a similar broad spread of porosity and permeability to those recorded in the upper *L.balmei* zone.